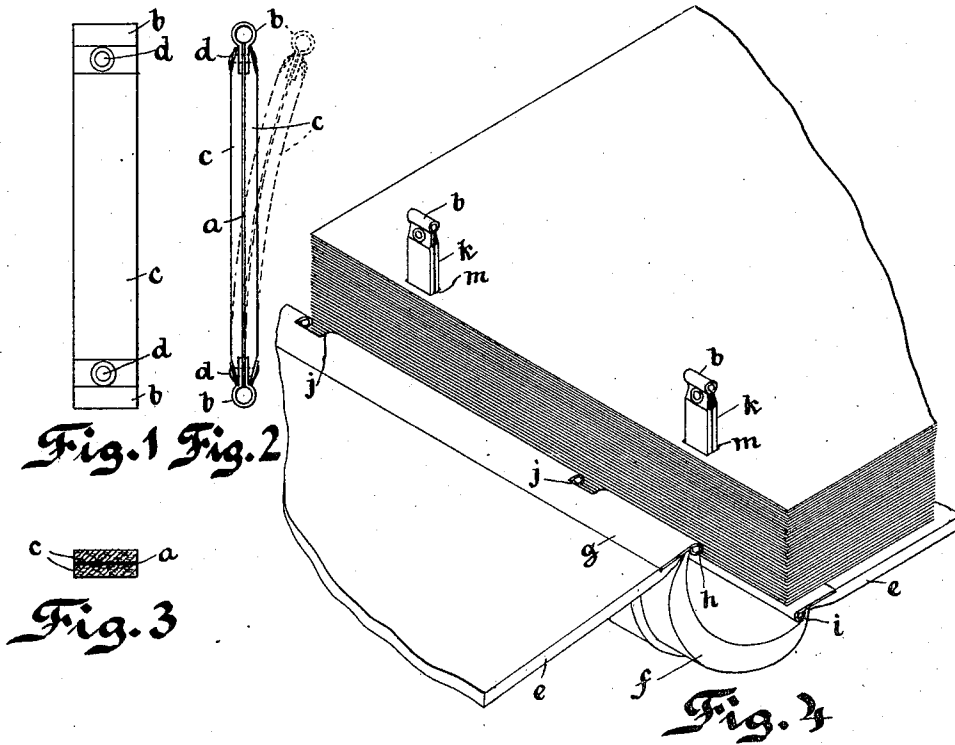


H. C. MILLER.
FLEXIBLE BINDER POST.
APPLICATION FILED NOV. 13, 1911.

1,019,174.

Patented Mar. 5, 1912.



Henry C. Miller,

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Witnesses

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HENRY C. MILLER, OF MILWAUKEE, WISCONSIN.

FLEXIBLE BINDER-POST.

1,019,174.

Specification of Letters Patent.

Patented Mar. 5, 1912.

Application filed November 13, 1911. Serial No. 659,963.

To all whom it may concern:

Be it known that I, HENRY C. MILLER, of Milwaukee, Wisconsin, have invented a Flexible Binder-Post, of which the following is a specification.

This invention relates to binder-posts for binders of that class which are used more particularly for preserving documentary records which are recorded in public offices, such as real estate conveyances, assignments, corporation articles, etc. Such loose-leaf books are provided with a fixed number of leaves and a nonextensible cover and binding-posts, said binding-posts being detachably connected with the back at each side, and the mode of use being to remove successively the top leaves, copy the records thereupon and replace them serially in order in the back of the book.

The present application relates only to a special form of flexible post which is intended more particularly for use with the special binder disclosed in my copending application No. 659,962 filed November 13, 1911.

The object of the invention is therefore to produce a nonextensible post inflexible in one plane and stiffly flexible in the other and having the requisite dimensions to give it not only the necessary rigidity and resiliency, but also to prevent it from cutting the leaves, and to give it a substantially uniform thickness.

The nature of my said invention, and in what manner it may be performed is herein best illustrated in the accompanying drawings, wherein—

Figure 1 is a front view of a post constructed according to my invention; Fig. 2 is a side-view thereof showing in dotted lines its flexibility; Fig. 3 is a transverse section thereof; and Fig. 4 is a fragmentary perspective view of a loose-leaf book with one of the pintle-rods removed to open the back and illustrate the mounting of the posts.

The reference letters refer each to the same part in each figure of the drawings.

My improved post comprises, first a thin strip of resilient metal, preferably spring-steel, *a*; secondly, a pair of looped members *b* forming pintle-eyes for the ends of the post; thirdly, a pair of flexible facing-pieces *c* mounted on opposite sides of the central resilient member *a*; and fourthly rivets *d* uniting the several pieces

together. The facings *c* may also be glued or otherwise secured to the strap *c* along the middle. For the facing-pieces *c* I have found leather the most suitable material, and such leather is preferably metallized upon the outer side to give it a smooth surface, upon which the edges of the apertures in the paper readily slide.

In Fig. 4, which illustrates the manner of use, is shown a loose-leaf book having covers *e* and the spring-back *f*, to which they are hingedly connected; also pintle-plates *g* having sockets *h* through which pass pintle-rods *i* (only one of which is shown in the drawing). The sockets *h* are cut away as shown at *j* opposite the flexible posts *k*, whose end-eyes *b* are seated in the recesses *j*, the pintle-rods *i* passing through them. The length of the post *k* is intended to be somewhat greater than that between the two covers, whereby the post *k* in the open or closed positions of the book assume forwardly or rearwardly-curved positions; but the means for causing them to assume such positions in use, is not here shown, as it forms no part of the present invention.

The supporting-member of the post is the metal strip *a*, but this if used alone would not only not fill the apertures *m* in the leaves, which have to be large enough to pass over the eyes *b*, but also would be so thin upon the edges that it would cut the paper. The flexible and slightly extensible but nonresilient facings *c* provide the necessary dimensions and at the same time add somewhat to the stiffness of the post.

I wish it understood that my invention is not limited to the use of all the above described features and constructions, for some may be omitted and others may be varied or modified in various ways, as will readily occur to those skilled in the art.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A nonextensible binder-post flexible in one plane only, comprising a thin metal strap, eyes upon the ends of said strap and facing-pieces of flexible and slightly extensible material on opposite sides of said strap.

2. A nonextensible binder-post flexible in one plane only, comprising a thin flat metal strap, a pair of members secured to the opposite ends of said strap, each of said

members having an eye-shaped loop and a pair of flanges including the end of said strap between them, a pair of facing-pieces on opposite sides of said strap and a pair of rivets passing through the respective ends of said strap, facing-pieces and flanges and securing them all together.

3. A nonextensible binder-post flexible in one plane only, comprising a thin metal strap, eyes upon the ends of said strap and

facing-pieces of flexible and slightly extensible material on opposite sides of said strap the outer sides of said facing-pieces being provided with metalline surfaces.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

HENRY C. MILLER.

Witnesses:

JUSTUS CAHN,

FERDINAND KMYSE, Jr.